

REMARKS/ARGUMENTS

Reconsideration of this amendment as presently amended and in light of the following discussion is respectfully requested.

Claims 2, 3, and 5-12 are pending, Claims 1 and 4 having been canceled without prejudice or disclaimer, and Claims 6, 10, 11 and 12 having been amended by way of the present amendment.

In the outstanding Office Action Claims 1, 4-6, 9-10 and 12 were rejected as being anticipated by Ziari (U.S. Patent No. 6,522,796); Claims 2-3 and 11 were rejected as being unpatentable over the combination of Ziari in view of Cornwell (U.S. Patent No. 6,356,383); and Claims 7-8 were rejected as being unpatentable over Ziari in view of Bergmann (U.S. Patent No. 6,040,492).

In reply, Claims 1 and 4 have been canceled without prejudice or disclaimer. Claim 6 has been amended to depend only on pending Claims 2, 3 and 5.

Before turning to the prior art rejections, Applicants file herewith an Information Disclosure Statement including several references, relating to product sold more than one year before the filing of the present U.S. application. Furthermore, a pending U.S. patent application is filed herewith (Edagawa et al., U.S. Patent Publication U.S. 2001/0053264). It is believed that each of the pending claims in the present application patentably define over the asserted prior art, as well as the prior art filed with this Information Disclosure Statement. Filed herewith is an accurate translation of Japanese Patent Application (JP 2001-022620). By perfecting priority to this priority document, Applicants believe that Edagawa et al. is not prior art with regard to the pending claims.

Applicants respectfully traverse the rejection of Claim 5 based on Ziari. Claim 5 requires one or a plurality of pairs of pump light sources. Furthermore, one or a plurality of individual light sources which are different therefrom is also required. The output lightwaves

from each pair of pump light sources are input to each of the polarization beam combiners (for example). The composite lightwave of each set of the lightwaves output from the individual light sources are combined by a polarization maintaining optical beam coupler and then the combined lightwaves are input to a depolarizer to output a lightwave with a lower degree of polarization as a pump light. Thus, a single depolarizer handles the output lightwave from each pair of pump light sources after being combined, and lightwaves that are output from the individual light sources.

Ziari in contrast, only describes two lasers that are combined with one another. Ziari does not disclose a pair of pump light sources, and then an individual light source, where the output from the pair as well as from the individual light source are ultimately (after polarization beam combining) passed through a depolarizer. Accordingly, it is respectfully submitted that Claim 5 patentably defines over Ziari.

With regard to Claim 2, Claim 2 requires a plurality of pairs of pump light sources, a plurality of sets of polarization beam combiners or polarization-maintaining optical beam couplers, and a plurality of sets of depolarizers. The output lightwaves from each pair of light sources are input to respective polarization beam combiners (for example). The composite lightwave of each set is then input to a set of depolarizers and then the depolarized lightwaves for each set are combined by an optical beam coupler.

In contrast, neither Ziari nor Cornwell disclose this combination of requirements. Moreover, Figure 5 in Cornwell shows separate pairs of pumps, each of which is processed independent of one another before application to the transmission fiber. In contrast, the invention defined by Claim 2 requires outputting “a pump light” which requires the coupling of the light from the respective light sources prior to application to the optical fiber. Accordingly, it is respectfully submitted that no matter how Ziari in view of Cornwell are combined, the combination neither teaches nor suggests the invention defined by Claim 2.

Independent Claim 3 was rejected over the combination of Ziari in view of Cornwell. The outstanding Office Action asserts that Ziari discloses everything except for a plurality of pairs of pump sources. The Office Action then asserts that Cornwell teaches the use of a plurality of pairs of pump sources which are coupled by a polarization beam combiner and subsequently depolarized. However, Claim 3 actually requires that, in addition to having a plurality of pairs of pump light sources, the output lightwaves from each pair being input to each set of polarization beam combiners (thus at least one polarization beam combiner per pair). Then, the combined lightwaves output from the respective polarization beam combiners are then input to a depolarizer. Cornwell neither teaches nor suggests this feature either in Figure 5 (as asserted in the outstanding Office Action or in the corresponding discussion at column 10, lines 62-67). Moreover, Figure 5 in Cornwell shows pairs of pump light sources, each of which are optically combined. However, the output of each optical combiner is then applied to the transmission optical fiber, without a depolarizer, receiving the outputs from the polarization beam combiners.

Claim 6, a dependent claim, has been amended to depend from any one of Claims 2, 3, and 5. As discussed above, it is respectfully submitted that neither of Ziari or Cornwell, nor any combination thereof teaches or suggests all of the features of any of Claims 2, 3, and 5. Therefore, because Claim 6 depends from Claims 2, 3 and 5, it is respectfully submitted that Claim 6 also patentably defines over the asserted prior art. Each of Claims 7-12 depend from Claim 6, and therefore, it is believed that each of these claims also patentably defines over the asserted prior art.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 2-3, and 5-12, as amended, patentably defines over the asserted prior art. The present application is therefore

believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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